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ABSTRACT

The process of institutionalizing off-campus work experience at the Comprehensive University of Kassel, West Germany, is described. The concepts of the comprehensive university and curricular reform in the Federal Republic of Germany are also addressed. The comprehensive university unites the tasks of research, teaching, and study that previously fell to different institutions, and it aims to facilitate transfer between different courses of study, as well as to help synthesize the academic orientation of the traditional university and the practical orientation of the nonuniversity institutions of higher education. The Comprehensive University of Kassel offers four basic types of courses of study: integrated course of study (e.g., architecture, urban planning, civil and mechanical engineering, agriculture, landscape planning, economics, and social work); teacher training; fine arts, graphic design, and industrial design; and conventional academic courses, confined at present to mathematics and physics. The integrated study course includes two semesters of work experience. In addition, Kassel still offers a number of vocational courses that are being phased out as the new integrated courses are being established. The following topics are addressed: problems of cooperation between employers and the comprehensive university, problems of the curricular integration of off-campus work experience, organizational problems with the university, and student problems. A bibliography is appended. (SW)

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Nr. 8

Ulrich Teichler

WORK-STUDY-PROGRAMS: THE CASE OF 'BERUFSPRAKTISCHE STUDIEN' AT THE COMPREHENSIVE UNIVERSITY OF KASSEL

8

Juni 1981

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Kassel, March 1981

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1. Introduction

Work experience as part of the education process leading up to a university degree is nothing new in Germany. In many subjects - notably engineering and economics - students are expected to participate in a 'Praktikum' as a pre-requisite to admission or as a requirement to be fulfilled before a student may take his final examination. Work experience as an integral part of higher education is, in contrast, an innovation. Such schemes were first introduced in the Seventies as 'Praxissemester' at vocational colleges (Fachhochschulen) in Bavaria and Baden-Württemberg, and in the form of 'Berufspraktische Studien' at the Comprehensive University of Kassel. Kassel is so far the only institution of higher education in the Federal Republic of Germany where roughly a year of guided occupational experience has been made an obligatory part of the program leading to a university degree.

So far as the university is concerned, the institutionalisation of such work experience inevitably creates readjustment problems and sets off a learning process in various quarters. The success of models of this sort hinges among other things on the readiness of government agencies and private enterprise to cooperate. In the case of the Comprehensive University of Kassel, debate on institutionalisation did not focus solely on the university itself and the region in which it is located, but also constantly referred back to the larger issue of reform of the whole system of West German higher education. The notion of grouping all institutions of higher education together into comprehensive universities had been a popular aim in 1970, and during the decade that followed there was repeated controversy over proposals to strengthen the German universities' orientation toward practice.

My main purpose in this paper is to describe and anylse the process of institutionalizing off-campus work experience at the Comprehensive University of Kassel. In view of the conditions and constraints just touched upon, it seems advisable to include some remarks about the concept and development of the comprehensive university, as well as some considerations about curricular reform in the Federal Republic of Germany.

2. Structural Reform of Higher Education and the Establishment of Comprehensive Universities

Universities in the Federal Republic of Germany have traditionally been considered to be roughly equal in standards. It was altogether in keeping with this principle of maintaining the system's homogeneity when, in the Fifties and Sixties, all other institutions of higher education - technical universities, teacher training colleges, arts colleges and theological seminaries - were subjected to a gradual process of up-grading.[1]

A major structural reform in higher education was adopted around 1970. Former higher vocational schools (Ingenieurschulen, höhere Fachschulen) were upgraded to Fachhochschulen, a non-university type of institution of higher education. Traditionally, students could enrol at higher vocational institutions after having completed ten years of primary and secondary education (the latter at the Realschule, the intermediate track), apprenticeship training, a few years of work, and after having finally passed an entrance examination. Subsequent to this reform, applicants were required to have completed twelve years of school - primary school, the Realschule, plus two years at a vocational high school, the Fachoberschule -, as opposed to thirteen years of school at primary school and the Gymnasium for those aiming for the traditional university.

While this reform was being carried out, debate on structural reform in higher education was carried one step further. Between 1967 and 1972 a multitude of models were proposed for incorporating almost all institutions of higher education into Gesamthochschulen, or comprehensive universities.[2]

Given the great number of concepts, plans and controversies, it is not possible to specify a fixed set of objectives. The definition given by the Federal Government does however include the main features of most of the models proposed:

"The comprehensive university unites the tasks in research, teaching and study that previously fell to different institutions. It offers gradated and interrelated courses of study and degrees. To this end, courses of study varying in content, duration, and academic degree awarded are to be set up within the same specialized field, if the scientific development and the sphere of occupational activity corresponding to the specialized field recommend diverse study goals."[3]

At least three major goals should be mentioned.[4] First, the comprehensive university aims to facilitate transfer between different courses of study. Second, it aims to promote a synthesis of the academic orientation of the traditional university and the practical orientation of the non-university institutions of higher education. A third goal is to make shorter routes of higher education more attractive, thereby reducing the per-student cost while at the same time expanding higher education. Facilitating transfer was expected to reduce inequality of opportunity on the basis of social background and sex. It was hoped in addition that the establishment of comprehensive universities would reduce regional disparities in the supply of higher education. Further, it was taken for granted that the comprehensive universities would adopt and develop the concepts of curricular reform popular in the early Seventies. Finally, comprehensive universities were expected to provide for a better utilization of resources.

By 1970, the differences between the various plans centered on three main points:

a. Organizational links: whereas the principal supporters of the comprehensive universities idea favored merging different types of institutions and courses of study into comprehensive models, opponants of such integration proposed establishing what they slyly called 'cooperativ' comprehensive institutions - which would involve more coordination of different institutions in the interest of facilitating transfer and sharing certain facilities - alongside other, 'integrated' institutions.

b. Modes of integrating courses of study: Various models for integrating courses of study have been proposed, all of which are based on the organizational model of an 'integrated' comprehensive university. In the so-called consecutive model all students would first complete a short-cycle course of study, whereupon a portion of these graduates would have the opportunity to continue for at least one additional year of academic study toward a university-level degree (diploma, master of arts, state examination).[5] Second, in the so-called Y-model all students would take part in a basic program lasting at most two years; then, depending on the outcome of an intermediate examination or some other screening procedure, students would embark on either a 'practice-oriented' short program or a 'theory-oriented' long program.[6] Among many other models under discussion, a third one became very popular for a time, though it never was realized: according to this 'modular

model' - the Baukasten-Gesamthochschule proposed by Ernst von Weizsäcker and others - all students would take part in a varying number of primarily short, intensive seminars and would be graded on their performance; during their course of study they could choose whether to settle for credits sufficient for a short-cycle degree or assemble enough such 'building blocks' for a university-level degree.[7]

c. Relationship between teaching and research: Major reform proposals - such as the one put forward by the Federation of University Assistants, or Bundesassistentenkonferenz[8] - have suggested that all university teachers should be involved both in research and in teaching the full range of courses in their fields, with the aim of integrating the educational objectives of both the traditional universities and the vocational colleges. Other proposals favor keeping the different types of courses - and the faculty groups engaged in teaching them - separate.

During the early Seventies three Länder established comprehensive universities. Hessia founded the Comprehensive University of Kassel, which chose as curricular prototype the consecutive model. Northrhine-Westphalia established six comprehensive universities, all of which favor the 'Y'-model, according to which students study a common core for two years and then split up into those who work for a short-cycle degree and those aiming toward a university degree. Bavaria founded four comprehensive institutions which set out to encompass different types of courses under one administrative roof but did not establish any coordination or integration of relating non-university and university-level courses. These Bavarian institutions have subsequently dropped the name of 'Gesamthochschule'.[9]

Finally in 1975 a compromise was reached in the Framework Act for Higher Education, or Hochschulrahmengesetz,[10] a federal law designed to bring the various institutions of higher education into line with one another. The Framework Act proposed the establishment of either 'integrated' or 'cooperative' comprehensive universities, or some other form of cooperation between institutions. Thus, the comprehensive university was envisioned as the standard institutional form of higher education, although no formal pressure was exerted to realize this goal. Although most of the Länder have passed laws on higher education calling for the establishment of comprehensive universities, it is interesting to note that not a single new comprehensive

university has been established since the Framework Act for Higher Education was put in force. Thus, out of a total of more than 200 institutions of higher education, the number of comprehensive universities has at no time exceeded eleven (cf. Table 1); and in the late Seventies only about 7 % of students were enrolled in comprehensive universities.

3. Courses of Study at the Comprehensive University of Kassel

In the Land of Hessia, legislation leading to the establishment of the Comprehensive University of Kassel was passed in the summer of 1970.[11] The Federal Republic of Germany's first comprehensive university opened its doors in the fall semester of 1971. It incorporated already existing vocational colleges of engineering, economics, agriculture, architecture and social work, as well as an arts college and a teacher training college. For a start, facilities for teacher training were quickly set up. At the same time, preparations got under way for recruiting teaching staff and for setting up 'integrated' courses of study.

All in all, the Comprehensive University of Kassel offers four basic types of courses of study:

a. The first integrated courses of study were offered in fall semester 1974. Such integrated courses now attract over 60 % of all first-year students. They are offered for students majoring in architecture, urban planning, landscape planning, civil engineering, mechanical engineering, agriculture, economics and social work.

The majority of these courses is designed on the lines of the model illustrated in Chart 1. All first-year students - those with the Abitur alongside those who have successfully completed higher vocational school - take part in a common basic studies program for two semesters, after which they leave campus for one semester of work experience. This is followed by four semesters of study in the chosen major field, the Hauptstudium. At the midway point in this phase, the student is expected to spend an additional semester in work experience. A final semester is reserved for writing the required thesis and preparing for the final examinations. On completion, the student is awarded the First Diploma. Although this diploma is formally equivalent to the short-cycle degree awarded by vocational colleges, the Fachhochschulen,

Table 1

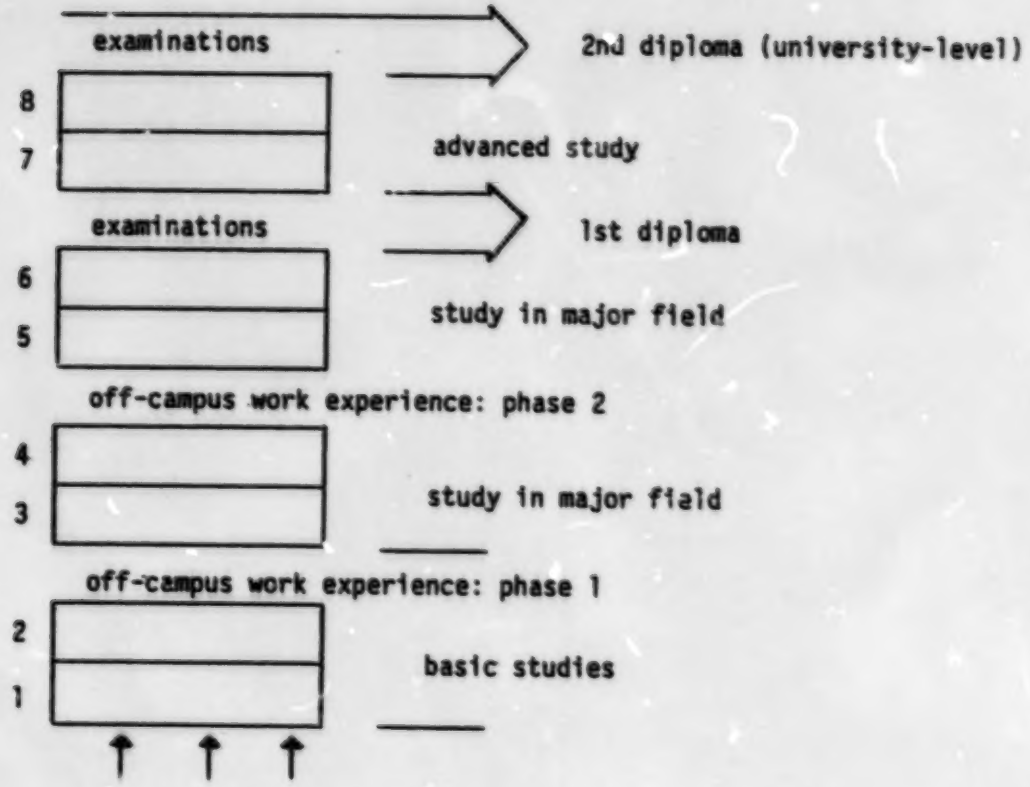
Institutions of the Systems of Higher Education, 1950-75

Type of Institution	1950	1960	1970	1975
Universities (including technical universities and special universities)	31	33	40	49
Comprehensive Institutions	-	-	-	11
Teachers Colleges	78	77	32	33
Theological Seminaries	16	17	14	11
Art Academies	18	25	27	26
Fachhochschulen	-	-	98	136
Total	143	152	211	266

Source: Hansgert Peisert and Gerhild Framhein, Systems of Higher Education: Federal Republic of Germany, New York: International Council for Education Development, 1978, p. 13

Chart 1

Model of an Integrated Course of Study*



Qualification for admission:

Abitur or

qualification for vocational college

* Variations possible

the course leading up to it is somewhat more demanding since it is also designed to prepare the student for university-level study. The student may then continue his studies for an additional year. An additional thesis and a second round of examinations lead to the Second Diploma, equivalent to a university degree. Such a sequence of degrees, customary in the United States, is not otherwise common practice in the Federal Republic of Germany. Thus, when graduates of Fachhochschulen decide to continue studies at a traditional university, it is usual for the university in question to determine on the merits of each individual case how much of the applicant's previous course of study can be counted toward advanced standing. At best, the student may receive credit for two semesters of study.

The primary aim of the curricular reforms introduced at the Comprehensive University of Kassel has been to create a synthesis of the research-oriented tradition of university teaching and the vocational approach of the Fachhochschulen.[12] In contrast to Fachhochschulen, the comprehensive university gives students the opportunity throughout their studies to attend courses given by teachers who are academically qualified for university teaching and who are actively engaged in research. Thus, students are confronted with scientific methods and a high academic standard to a greater extent than would otherwise be the case, and some of them take part in research projects. In contrast to traditional university study, the integrated courses of study seek in the following four ways to provide students with orientation in the practical application of what they are learning.

- First-year students are required to attend orientation courses, introducing them to the courses offered in their chosen field and providing them with information on career opportunities.
- Two additional semesters are devoted to work experience; this will be discussed more fully below.
- Part of a student's course of study is devoted to learning in projects (Projektstudium) in which they explore and learn to solve complex interdisciplinary problems of a more practical nature.
- Senior-level courses are designed to prepare the student for a wide range of activities in his general occupational field, and should avoid encouraging narrow vocational specialisation or specialisation along traditional academic lines.

b. A second type of course of study covers teacher training. A number of reforms of teacher training have been introduced at Kassel which have been carried out at only few other universities in the Federal Republic of Germany:

- Teacher training is structured horizontally, corresponding to the levels of primary education, lower secondary education, and upper secondary education, instead of corresponding to the traditional vertical structure of secondary schools (Gymnasium, Realschule, Hauptschule).
- At least one quarter of the courses a student takes are in pedagogics and social science, rather than in the subjects he later plans to teach.
- All students are required to take part in the so-called Schulpraktische Studien - five weeks of observation in regular schools. All universities in the Land of Hessia have now added such practical experience to their teacher training programs.

c. The third type of curriculum at the Comprehensive University of Kassel embraces the courses in fine arts, graphic design and industrial design. Course requirements are more flexible than in other fields. In this respect there is little difference between Kassel and other colleges of fine arts.

d. The fourth type of curriculum is the conventional academic course, confined at present to mathematics and physics. Admissions requirements and course of study do not differ from those at traditional universities. Programs of this sort are currently being worked out for majors in chemistry, biology, social science and psychology, and it is being considered to include in them some aspects of the 'integrated' approach - as a minimum, half a year of work experience.

Finally, Kassel still offers a number of courses which used to be part of one of the constituent Fachhochschulen. These are gradually being phased out as the new 'integrated' courses are being established.

The total number of students at the Comprehensive University of Kassel was 7,678 in fall semester 1980 (cf. Table 2). Of these, 45 % are enrolled in 'integrated' courses of study, a number that is expected to grow to around 60 % in the coming five years.

Table 2

Students at Gesamthochschule Kassel by Field of Study

A. Integrated Courses	
Agriculture	181
Architecture, City Planning, Landscape Planning	710
Civil Engineering	386
Mechanical Engineering	607
Electrical Engineering	78
Economics	347
Social Work	1,029
B. Teacher Training	
C. Fine Arts	587
D. University Courses	
Mathematics	50
Physics	58
Others	4
E. Vocational College Courses	932
F. Others	616
Total	7,678

4. Off-Campus Work Experience

Students in most of the integrated programs are required to spend two semesters acquiring off-campus work experience.[13] Such Berufspraktische Studien in the fields of engineering, architecture and economics take place in two phases. The first phase takes place after the student has completed basic studies in his field. The official objectives are as follows:

1. to give students career orientation;
2. to give them an opportunity to become acquainted with work and production techniques in the relevant occupation;
3. to give them a sense of the technical and organisational context within which they will eventually work, and to make them aware of the social implications of the profession;
4. to give students a chance to take part in the work process to the extent their training up to this point allows.

The objectives of the second phase are given as follows:

1. to deepen and widen the experience made during the first phase of the program;
2. to give students practical training in dealing with the kind of concrete problems connected with planning, construction and manufacture in the student's fields of special interest;
3. to prepare students for practice-oriented projects or a practice-oriented theses.[14]

Courses scheduled for the semester immediately preceding work experience are designed to prepare students for what awaits them off-campus, whereas subsequent courses aid them in evaluating their practical experience. In addition, special seminars are conducted in conjunction with and parallel to the off-campus activity.

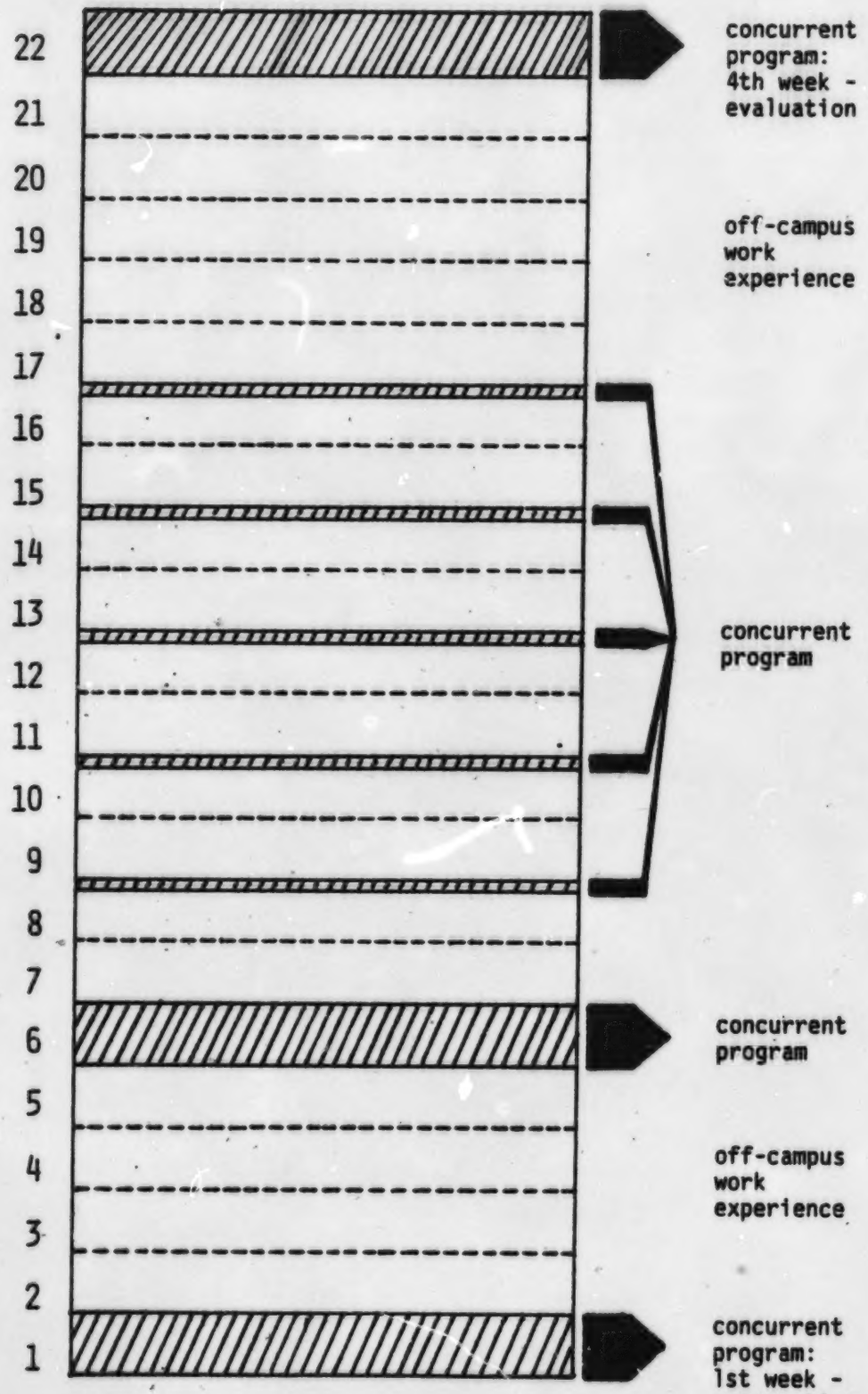
Eighteen of the twenty-two weeks that make up the off-campus semester are spent at the workplace. The remaining four weeks are devoted to concurrent seminars related to this practical experience. In a number of fields, as can be seen in Chart 2, these classes are mostly grouped in blocks - in a first preparatory week, in the sixth, and in a final evaluation week. In some subjects the concurrent seminars follow a different schedule.

The models vary somewhat according to the field of study. Students working toward a degree in social work, for example, spend a whole year in off-campus work experience after having completed the first four semesters of study. Students of agriculture, on the other hand, have only one semester of practical experience, but it is extended through the whole of the following vacation period. In this way their course of study is lengthened by only one semester.

Work assignments are made by the Comprehensive University. Alternatively, it may approve a placement a student has secured on his own. In order to guarantee that a sufficient number of appropriate openings is available on a continuing basis, the Comprehensive University enters into a contractual relationship with each employer in which both parties agree to carry out the objectives of the off-campus work experience program.[15] The employers - in both the private and the public sectors - undertake to provide a certain number of openings each year and to appoint an on-the-job supervisor. The Hessian government - party to such contracts by virtue of the fact that the Comprehensive University, like all German universities, is a state university - assumes liability in the event of accident to a student or damage to the employer's property in connection with this program.

In addition, the employer enters into a agreement with each individual student, guaranteeing him training opportunity, time off to attend concurrent seminars at the university, and a certificate at the end, attesting to the number of weeks the student pledges to participate in the training

Chart 2: Model of the Off-Campus Work Experience Program*



* Variations possible

program, to follow his supervisor's instructions, and to comply with the works regulations or other rules.

During these phases of off-campus learning, the student remains enrolled in the Comprehensive University. Scholarship students continue to draw their stipends. Employers are not obliged to remunerate the students.

In some areas of studies, university teachers provide on-the-job supervision for a small group of students. Their job is to mediate between the employer and the students, help to solve any problems that might arise, advise the students and work together with the employers in improving the training program.

The Comprehensive University maintains a Coordinating Office. It seven-member professional staff negotiates with the employers on making training opportunities available and assign openings to the students, in addition to other organisational and administrative functions.[16] These coordinators cooperate with university teachers in scheduling concurrent seminars and in counselling students who are out in the field. They also cooperate with special groups engaged in curricular development and institutional research.

At the end of his off-campus work experience, each student is required to submit the certificate issued by the employer to the effect that he has taken part in the program. He also is required to write a report on some aspect of his off-campus work experience. Those students who have already had a certain amount of work experience prior to entering the university may be freed from the first of these two periods of off-campus training; they do have to attend the concurrent seminars, however, and are expected to write a lengthy paper on a topic dealing with the practical application of some aspect of their studies.

Before turning to details of the process of institutionalizating such off-campus work experience and the problems that have arisen in this context, I would like for purposes of comparison to draw attention to the situation in other Länder. In Baden-Württemberg, parallel instruction is not provided at all.[17] In Bavaria, practice semesters are organized by instructors specially entrusted with this job. Students are as a rule expected to locate their own trainee positions. Relatively little emphasis is placed on parallel instruction at the universities and scheduling differs considerably from place to place.[18]

All in all, the main difference is that in Kassel more emphasis is placed on relating on-campus and off-campus learning. Kassel is also more concerned with making students aware of the social implications of working life.

5. Problems of Cooperation between Employers and the Comprehensive University

When the Comprehensive University of Kassel set out to establish an off-campus work experience program, it was prepared for employers to adopt a wait-and-see position, react sceptically, or even reject the idea altogether. Such a reaction was predictable for political reasons, in particular because of marked differences of opinion on education policy.

- It was the dominant view in both private enterprise and government agencies that the number of students had grown too much over the past few years and that there was a danger of 'over-education'.[19]
- Employers' representatives in the Federal Republic of Germany were strongly opposed to the whole concept of the comprehensive university. They preferred seeing a clear line drawn between the vocationally oriented Fachhochschulen and the academically oriented universities. They feared that the Comprehensive University would blur the distinction between the two, a distinction they considered functional to the occupation structure.[20]
- Although student unrest had died down by the mid-Seventies, students continued to have a rather bad reputation among employers; many employers feared that students would cause trouble and would bring confidential information into the open.
- A major reason for the employers' sceptical attitude toward the Comprehensive University of Kassel and its educational concept was the fact that the unions - specifically the teachers' union and the public employees' union - were very influential in the university's decision-making bodies, where consequently there was a left-wing majority. Support for the off-campus work experience program was greater from the left than from the conservative faction at the Comprehensive University.

This reticence on the part of the employers was to some extent counterbalanced by two factors. In the first place, employers had gradually come to the conclusion that a greater practice-orientation in university education would help in resolving potential conflicts arising out of the discrepancies between the output of the education system and the presumed demand.

In the second place, the new comprehensive university was seen as a means of securing, on the long run, qualified personnel for the economically underdeveloped region of northern Hessia.

Employers in both the public and the private sectors in the Federal Republic have long been accustomed to taking students into their enterprises as 'Praktikant', either before they enter university or during vacations. The status of 'Praktikant' - irrespective of whether the student is heading for vocational school or an institution of higher education - is well established by custom and by long experience in employing them in specific types of activities, and legal privisions govern, among other things, their financial compensation. Thus, so far as the comprehensive university is concerned, the problem lay less in motivating employers to accept students in their enterprise than in overcoming their reluctance to promote closer ties between the work experience and academic program. It was undoubtedly a great drawback that his new educational concept was put into practice as an experiment on a local basis and lacked the kind of formal legal backing the 'Praktika' have. This in particular gave rise to difficulties placing students in public agencies.

Under these circumstances, the university sought to gain acceptance for its concept by adopting a very 'soft' negotiating strategy. Contracts between the university and employers are very open and vague on the point of the content of on-the-job training. Moreover, employers are in no way obliged to give student-trainees financial compensation. The hope was that the continuing experience of cooperation and the negligible expense involved would encourage employers in the long run to progressively adjust the on-the-job learning conditions to the objectives of the university's off-campus work experience program.

The university had no alternative to this strategy, for there was no other way of getting employers to take the comprehensive university's

educational concept into account. The danger in such a strategy is that, as a result, students have tended to encounter widely differing conditions from one workplace to the other; one employer pays them better than 'Praktikanten', and the other pays them nothing. In one place they are kept busy doing routine jobs, in another they are permitted merely to watch, and in yet another they are offered a sensible combination of varied experience and concrete training in specific activities.

As a matter of fact, in quite a number of cases it has been possible to bring about improvement in the work experience programs by bringing together the university teachers who act as counsellors, the coordinators for off-campus work experience, and the on-the-job supervisors. A number of these supervisors have taken part in occasional discussions within the university on how the overall concept of off-campus work experience and its implementation can be improved.

It has been repeatedly suggested that a framework be established for regular cooperation between the university and the supervisors who deal with the students in the various enterprises. The difficulty here is that the university, being state financed and hence subject to far-reaching state budget control, does not have the financial leeway necessary to institutionalize such cooperation. The only area where the university has thus far succeeded in regularizing such cooperation is in the field of teacher training, where many teachers are interested in cooperation with the university and where load reductions and temporary leave enable experienced school teachers to take part in university teacher training.

One conclusion that has to be drawn from the past few years of becoming adjusted to the new program is that the university clearly has far less influence on the way the program is carried out than was originally considered advisable. On the other hand, the employers have proven altogether more amenable to providing students with a truly educational work experience than could have been expected on the basis of formal contracts alone. Moreover, as time has gone on, employers have become more well-disposed toward the concept of off-campus work experience and more satisfied with the way it functions.

In 1980 the Chamber of Industry and Commerce in Kassel conducted a survey which showed that the majority of firms now taken a positive view of the

work experience program. To everyone's surprise, employers' readiness to give students an opportunity for work experience has appreciably grown. Gradually, arrangements have been found for some sort of remuneration. For example, in 1979 the regional office of the employers' association in Kassel recommended that employers give students a monthly sum of 240 Marks, even if their presence in the enterprise is not in any direct sense productive.

6. Problems of the Curricular Integration of Off-Campus Work Experience

The programs of off-campus work experience at the Comprehensive University of Kassel differs in two significant ways from the older 'Praktika' associated with a number of fields of study.

- The sandwich system of alternating academic study and work experience allows students to gain career-oriented experience at key points in their studies, enabling them to apply what they have been learning, acquire understanding for the kind of practical problems their chosen profession entails, and take such practical problems into account in their subsequent academic work.
- Work experience is integrated in the academic program by means of preparation in the preceding semester, concurrent seminars, and evaluation in course held on the student's return to regular study.

Curricular integration is the business not of a central department of cooperative education, as is the case in a number of American colleges and universities, but rather of each individual department. This means that the regular teaching staff is expected to deal with work experience as part of ordinary instruction, offer concurrent seminars for students temporarily working off-campus, and counsel them while they are on the job. A special commission is set up in each department to coordinate these activities.

After a period of initial experience with this program, opinion is that although it is felt to be as important now as ever before and has been improving in some departments, curricular integration leaves much to be desired. Students in particular are critical of current practice. In 1978 a survey was conducted among students majoring in architecture, urban planning and landscape planning who had just completed the first phase of off-

campus work experience. Asked how they would evaluate advance preparation,
- 9% rated it 'good',
- 38% rated it 'so-so', and
- 53% rated it 'poor'.[21]

Faculty guidance during the off-campus program came off somewhat better:
- 31% of the students rated it 'good',
- 41% rated it 'satisfactory', and
- 28% rated it 'poor' or had received no guidance whatsoever.[22]

Four reasons in particular are given for the difficulties encountered in integrating the program in the curriculum.

a. Faculty supervision of on-the-job training is made difficult by the fact that many students are placed in enterprises located some distance away from the university. There are not enough such opportunities available in the north Hessia region. In 1975, for example, there were places in the immediate vicinity of the comprehensive university for only 40% of the eligible students in the three fields of architecture, urban planning and landscape planning.[23]

b. The attitude of university teachers toward the off-campus work experience program has not always been constructive.[24] Some reject the concept outright and prefer conventional 'Praktika' without curricular integration. Others are so set in their teaching ways that they seek to avoid any new activities. Others feel uncomfortable in the face of a complex and more indeterminate situation, one which calls for cooperation with students outside the classroom. All in all, it should be borne in mind that Germany's academic tradition has left its stamp on university teachers in the Federal Republic, and as a rule they are less inclined that their American counterparts to identify with their institution and less prepared to look after the well-being of their students outside the classroom.

c. There is good reason to doubt whether in some cases university teachers are properly equipped to assume the sort of guidance required.[25] A good many members, accustomed to teaching within a narrow range of specialization, feel out of their depth when called upon to advise students on complex problems of a practical nature, supply answers to questions about the way work is organized, or help when problems of communication arise.

d. To some extent the difficulties connected with curricular integration are related to the problem of faculty work load. In theory, university teachers may have the amount of time spent in counseling students and conducting concurrent seminars deducted from their teaching load, meaning they would have to give fewer hours of lectures. In practice, however, it is not possible under prevailing conditions in some departments to provide the desirable intensive guidance - and this unquestionably requires keeping the concurrent seminars down to a small size - without neglecting regular instruction.

e. Many university teachers and students complain that neither improved advance preparation for the off-campus program nor improved guidance are of much help, since the quality of work experience a student has depends on conditions in the workplace itself and these are hardly subject to outside influence. In their view, as long as employers are unwilling or unable to allow closer coordination, there is little the university can do to overcome the student's isolation.

f. Criticism has been voiced to the effect that the concepts of curricular integration have either remained too vague or have not been convincing: Fundamental clarification is called for to determine which types of lectures and guidance are effective and which desiderata emerge in the course of work experience, as a first step toward improvement.

Both the employers and the comprehensive university have gradually become accustomed to cooperation. This encouraging development is unfortunately not paralleled by any clear-cut trend toward improvement in curricular integration. It is not clear whether the problem is merely transitional, a typical part of the process of institutionalisation, or whether we are dealing with a more persistent problem. The Comprehensive University of Kassel is now setting out to systematically evaluate all previous experience and devise various models for concurrent courses and guidance. It has appiied for Federal and State funds in order to carry out this project over the period between 1981 and 1983.

7. Organizational Problems within the University

The off-campus work experience program entails four types of organizational activitiy:

- securing appropriate work assignments;
- dealing with organizational problems arising from the students' change of location (insurance coverage, questions concerning stipends, etc.);
- student placement and supervisory activities (giving credit for taking part in the program, settling any conflicts that arise between the firms and the students, etc.);
- coordinating the concurrent seminars and the guidance program.

The cost of organizing and administering the off-campus work experience program in Kassel is far and away greater than it is for the practice semesters at the Fachhochschulen in Bavaria and Baden-Württemberg. In the latter Länder, students as a rule have to locate their own jobs, whereas at the Comprehensive University of Kassel it is considered advisable for the university to assume this responsibility. There are a number of reasons for this: to begin with, for some time there was reason to expect that students would run up against objections on the part of employers against students in general and the comprehensive university in particular. Moreover, it remains difficult to locate assignments in certain fields in the vicinity of the university. More important, keeping the responsibility for securing work assignments in the hands of the university is seen as the best means of maintaining a high standard of quality in the work experience program.

The Comprehensive University of Kassel employs seven full-time coordinators responsible for organizing and administering the off-campus work experience program. As an administrative unit they are directly subordinate to the university administration, but their individual offices are located in the particular departments to which they are assigned. All in all, this solution has become generally accepted and the coordinators' activities are well received. It has become clear that continuity and experience are needed if their work is to be effective. Employers have also come to appreciate having a regular contact person in the university.

Nonetheless, there is still debate as to whether this is indeed the most desirable solution. There are three basic issues:

a. University staff has traditionally been fairly neatly divided into teaching staff on the one hand and administrative personnel on the other.

A relatively new development is the recruitment of professional staff for such special responsibilities as planning, student guidance, etc. There is no special institutionalized training for professionals of this sort, nor have regular career patterns emerged. There are as yet no professional associations or similar interest groups devoted to securing professional recognition for such personnel. Under these circumstances, coordinators feel uncertain as to their position, and the situation puts them in a weak position when they have problems to solve and activities to coordinate with the faculty on one side and the administration on the other.[26]

b. A second problem is that there continue to be differences of opinion about whether the coordinators should, as a unit, be subordinate to the central administration or be individually responsible to the separate departments. The solution finally settled upon underlines the importance attached to joint responsibilities and shared know-how, as for example in drafting contracts, matters of organization, etc. The result, however, does create a certain distance between the coordinator and the faculty.

c. Finally, there is some question as to whether it is wise to draw a sharp line between organizational activities and educative tasks, and whether the regular faculty is in fact capable of handling all the educative tasks involved in the off-campus work experience program. The coordinators do, in fact, assume certain guidance responsibilities, and in some respects they would seem to be better suited than university teachers to carry out the concurrent seminars and handle supervision at the various places of work. Also under discussion is the question of whether it would not be better to put guidance and various aspects of the concurrent seminar program in the hands of special teaching staff who would be better informed about the relation between higher education and employment and who would be better equipped to deal with student guidance and other aspects than the regular departmental teaching staff.

Of all the problems that have arisen in the process of institutionalizing the off-campus work experience program, one has found a particularly widely accepted solution: to place the everyday administration of the program in the hands of a specially recruited professional staff. Nevertheless, as time goes on changes may become necessary in order to establish permanent career patterns for these administrators as well es to set up a special staff in charge of curricular integration.

8. Student Problems

Off-campus work experience poses a financial problem for most students participating in the program. For a period of time there was some uncertainty as to whether the government would continue making regular stipend payments during this period to students who receive state scholarships. It is now settled that the payments will continue. Still, students often have to face special expenses for travel, possibly rent for a room near work, etc. In addition, participation in the program means sacrificing vacation opportunities for earning money. Under these circumstances it is no wonder that most students prefer those assignments where they can get the best financial compensation, even if such work experience has relatively little bearing on their studies.

In addition, discussion continues about the formal status of students participating in the off-campus program.[27] During this period they retain their status as students and at the same time are 'guests' at their workplaces, where they have no particular rights. In this respect, they are at something of a disadvantage to young apprentices, whose status as temporary employees means that they are in the charge of the Works Council. Students' representatives would prefer such a status, since then their work experience would be more like the real thing, they would have more rights and could be placed on the same basis as apprentices so far as remuneration is concerned. The Comprehensive University, on the other hand, favors retaining student status for the participants in the hope that this will allow the university to exert a greater influence on the way the work experience program is carried out in the various enterprises.

A final point that should be made is that many students are sceptical about the program or even tend to reject it, in some instances having had a disappointing experience. The very fact that frequently no or only minimal payment is made - this being justified by the heavy emphasis placed on the educative aspects of the program - has the effect of forcing up students' expectations. In practice, students are often disappointed to discover that work experience consists of uninteresting routine activities, or they find the job unpleasantly tasking, due to insufficient advance preparation.[28] It is the first of the two practice phases that is most

frequently criticised. It is also often noted that there is too little curricular integration. Nonetheless, it appears that over the course of time students have come to accept the work experience program more and more.

9. Institutionalizing the Model of Combined Work and Education: Experience to Date and Future Prospects

Every new program involves a certain amount of trial and error in the process of implementation. This leads to one improvement after the other, but it also may give rise to a measure of disenchantment: one becomes resigned to less than optimal results. One also gains insight into a given program's specific, persistent problems. As a rule, it is no easy task to submit a program to sober assessment and reformulation, for the problems that come to the surface in the process have a way of striking a blow to the pride of the program's often influential promotors. The concentrated effort necessary to get a program accepted makes it difficult to introduce modifications without appearing to harm the backers' reputations. All this is compounded by the fact that once established, organizations have a strong propensity toward self-perpetuation. In the case of the Comprehensive University of Kassel there is the additional factor that the very concept of 'comprehensive university' was under fire; furthermore, pressure to preserve the prevailing homogeneous character of West German higher education has been stronger than interest in diversification and establishing special programs.

It may be noted in conclusion, however, that the first five years have brought a certain consolidation in the off-campus work experience program. The second practice phase, at least, now finds general acceptance. Employers show increasing willingness to provide openings and are prepared at least to some extent to give in to the university's wishes in regard to implementation. There is also growing feeling that isolated Praktika should give way to curricular integration of off-campus work experience. And finally, it is now generally accepted that professional staff is needed for the organization and administration of the off-campus work experience program. All in all, a certain amount of routine has been established in organizational aspects of the program.

On the other hand there are a number of persistent problems which no amount of slow adjustment and growing routine can solve. There are limits to the extent to which the university can influence the way the employers design the work experience. In addition, curricular integration is not simply a question of optimalizing a program, and there are clearly contraints involved on the extent to which integration can be realized. So far as the students' situation is concerned, there is no satisfactory solution in view. As a result of these problems, the off-campus work experience program may eventually be accorded less importance than was originally intended, and it may be that in some fields of study this may mean cuts in the amount of time spent off campus. All in all, however, there is no reason to doubt that the model will survive at least in its principal features, and it can be expected to improve as time goes on.

The model's prospects depend not merely on how well it functions at the Comprehensive University of Kassel, but also on the way the whole West German system of higher education develops. It is apparent that comprehensive universities have remained the exception to the rule and that at the moment the few that exist are under considerable pressure to revert to conventional universities. On the one hand, practice semesters have been very well received at the Fachhochschulen in Bavaria and Baden-Württemberg; on the other hand, Praktika are an isolated phenomenon at other universities. Against this background, the off-campus work experience program at the Comprehensive University of Kassel is ambivalent: the scheme can be seen as the outstanding feature of an interesting, practice-oriented course of studies or, equally well, as a blemish from the point of view of the traditional, research-oriented university. Thus, the fate of the off-campus work experience program depends among other things on the future course of higher education as a whole. There is reason to believe that West German higher education will become institutionally more diversified in the course of the Eighties; moreover, the number of students is expected to decrease in the Nineties, and consequently the institutions of higher education will need to renew their efforts to attract students. In this event, the off-campus work experience program of the Comprehensive University of Kassel will surely be seen as an attractive feature.

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2 On comprehensive Universities see Otto Herz: "Plans for Comprehensive Higher Institutions", in Western European Education, Vol. 2, 1970-71. pp. 351-365; Problems of Integrated Higher Education: An International Case Study of the Gesamthochschule, Paris: International Association of Universities 1972; Hildegard Hamm-Brücher: "Towards the Comprehensive University in Germany", in The World Yearbook of Education 1972/73, London: Evans 1972, pp. 325-335; Ulrich Teichler: Comprehensive Universities: History, Implementation Process and Future Prospects. Paper presented to the Conference "Integration of Higher Education: Assesment of Policy, Outcome, Prospect in the United Staes, Sweden and the Federal Republic of Germany" at the Graduate School and University Center, The City University of New York, December 11 and 12, 1980.

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4 Cf. the overview given in Ulrich Teichler: A Challange to the German Higher Education System, London: London Association of Comparative Educationists 1980 (Occasional Papers, No. 1).

5 Cf. Gesamthochschule Kassel: Gesamthochschule Kassel: Bericht des Gründungspräsidenten: Oktober 1972 - Juni 1977, Peter Faulstich: "Studienreform an der Gesamthochschule Kassel", in Jörn Schmidt, ed.: Gesamthochschule: Eine vorläufige Bilanz, Hamburg: Arbeitsgemeinschaft für Hochschuldidaktik 1980, pp. 91-113.

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10 Bundesminister für Bildung und Wissenschaft: Framework Act for Higher Education, Bonn 1976; cf. also Ulrich Teichler: "Problems of West German Universities on the Way to Mass Higher Education", in Western European Education, Vol. 8, Nos. 1-2, 1976, pp. 81-120.

11 On the Comprehensive University of Kassel see Symposium Die Gesamthochschule Heute, Kassel: Bärenreiter 1976; Gesamthochschule Kassel: Gesamthochschule Kassel: Bericht des Präsidenten: Januar 1979 - März 1980, Winkler, op. cit.; Faulstich, op. cit.; Wilhelm Ruwe: "Der integrierte Studiengang Architektur, Stadtplanung, Landschaftsplanung an der Gesamthochschule Kassel"; in J. Schmidt, op. cit., pp. 115-141.

12 On orientation toward practise see Ulrich Teichler and Helmut Winkler, eds.: Praxisorientierung des Studiums, Frankfurt/M. and New York: Campus 1979; Kasseler Hochschulbund e.V. and Wissenschaftliches Zentrum für Berufs- und Hochschulforschung, Gesamthochschule Kassel: Symposium Praxisorientierung des Studiums, 6. bis 8. Februar 1980, Kassel: Stauda 1980.

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14 See Faulstich, op. cit., p. 98.

15 Cf. Renate Petzinger: "Berufspraktische Studien im Integrierten Diplom-Studiengang Architektur, Stadtplanung, Landschaftsplanung an der Gesamthochschule Kassel", in Karl-Heinz Hüllbusch et al., eds.: Erfahrungen mit dem Modell der buerfspraktischen Studien. Kassel: Gesamthochschule Kassel 1979, pp. 13-43.

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22 Pommerening and Westphal, op. cit., p. 331.

23 Renate Petzinger: "Das Referat für Berufspraktische Studien im Bereich Architektur, Stadtplanung, Landschaftsplanung an der Gesamthochschule Kassel", op. cit., p. 56.

24 See Ruwe, op. cit., p. 129.

25 Carl-Hellmut Wagemann: "Defizite Praxisorientierter Qualifikationen von Hochschullehrern", in: Gabriele Freidank, Aylâ Neusel and Ulrich Teichler, eds.: Praxisorientierung als institutionelles Problem der Hochschule, Frankfurt/M. and New York: Campus 1980, pp. 26-32. Rudolf Messner: "Qualifikation und Aufgaben der Lehrenden: Ergebnisse der Expertenberatungen", in Freidank et al., op. cit., pp. 33-47.

26 Cf. Aylâ Neusel: "Professionalisierung praxisorientierter Funktionen", in Freidank et al., op. cit., pp. 55-64; Gabriele Wiechmann: "Arbeitsteilung innerhalb der Hochschule: Ergebnisse von Expertenberatungen", in Freidank et al., op. cit., pp. 65-80.

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28 Cf. Pommerening and Westphal, op. cit.